

## 46 New County Records of Reptiles and Amphibians in Oklahoma, USA

As a result of its central location in the United States and the intricate mosaic of environments present, Oklahoma hosts a diverse assemblage of 94 reptile and 58 amphibian species (Sievert and Sievert 2021). With 15 distinct ecoregions existing within the state, and a correspondingly variable climate, Oklahoma represents the interface of many taxa that reach their eastern, western, northern, and/or southern distributional limits here (Sievert and Sievert 2021). Other species with generalist life-histories can be found more broadly distributed throughout the state, inhabiting multiple ecoregions and habitat types. Because of the unique topographic and environmental factors present in Oklahoma, the distributional patterns of reptiles and amphibians are complex and warrant further investigation. Oklahoma has a strong history of voucher collecting, and a handful of natural history collections are distributed across the state, with additional out of state collections also containing considerable holdings of Oklahoma specimens. Many voucher specimens in collections represent historic specimens, lacking genetic samples and precise collection data. Additionally, many of these historic collections overrepresent counties where major institutions are located or where major collecting efforts have previously been focused. A paucity of voucher specimens exists to represent entire distributions for many species in the state and continued voucher collecting remains vital to understanding shifting species distributions in the face of environmental degradation and global climate change.

Although we include records from across the state, many records listed herein come from counties in central and eastern Oklahoma that have been historically under surveyed. This region generally represents the transition between Central Great Plains and Crosstimbers ecoregions (Omernik 1995) and is characterized by flat to rolling topography dominated by mixed grassland and woodlands. Most lands in this region are privately owned, with land usage being allocated to cattle rangelands and oil extraction (OCC Well Data Finder 2022). Major potential threats to herpetofauna in the region include overgrazing, alteration of native vegetation communities, anthropogenic developments, and oil related disturbance/contamination.

Here, we present 46 new county records for 33 species of reptiles and amphibians in Oklahoma. County records were determined by examining Webb (1970), Secor and Carpenter (1984), individual accounts published in *Herpetological Review*, and VertNet.org queries. In addition, we used White and Husak (2015) and

White et al. (2016) as references to determine county records for *Hemidactylus turcicus*. We deposited all voucher specimens at the Collection of Vertebrates at Oklahoma State University (OSUS) and Daniel S. Moen verified all species identifications. Locality information was collected with a handheld GPS (WGS 84). Nomenclature used herein follows that of Crother (2017). We follow Sievert and Sievert (2021) in listing the Cope's Gray Treefrog/Gray Treefrog complex (*Hyla chrysoscelis/versicolor*) rather than attempting to differentiate between these morphologically indistinguishable species. All recent specimens were collected under Oklahoma Department of Wildlife Conservation Scientific Collectors Permits issued to NRB (10372246) and JJW (10071740), and all collecting activities followed an approved Oklahoma State University IACUC protocol (AUP #22-33). Genetic tissue samples (liver or skeletal muscle) were collected from all individuals and deposited alongside the specimen. Outside of specimens housed at OSUS, many of the closest known specimen records are from the American Museum of Natural History (AMNH), Carnegie Museum of Natural History (CM), Sternberg Museum of Natural History (FHSN), Museum of Southwestern Biology (MSB), Sam Noble Oklahoma Museum of Natural History (OMNH), University of Kansas Biodiversity Institute (KU), University of Michigan Museum of Zoology (UMMZ), and the University of Nebraska State Museum (UNSM).

### CAUDATA — SALAMANDERS

**AMBYSTOMA MAVORTIUM (Western Tiger Salamander).** Woods Co.: Hwy 64 at N2360 Rd (36.79776°N, 98.80802°W), 476.74 m elev. 6 June 2022. Neil R. Balchan, Jesse J. Whitlock, and Aaron Short. OSUS A8158 (NRB 0033). One subadult (87 mm SVL, 65 mm TL, 18 g) collected actively moving across road at 0229 h. This specimen represents a new county record and fills a gap in the known range of this species in Oklahoma. *Ambystoma mavortium* is known from adjacent Harper, Woodward, Major, and Alfalfa counties, and the nearest known specimen is from ca. 45.9 km to the southwest in Woodward County (OMNH 26692).

### ANURA — FROGS

**ACRIS BLANCHARDI (Blanchard's Cricket Frog).** OKFUSKEE Co.: underneath Hwy 48 bridge ca. 1.0 km N of E 960 Rd (35.63630°N, 96.38784°W), 200.57 m elev. 2 September 2022. Neil R. Balchan and Jesse J. Whitlock. OSUS A8154 (NRB 0075). One adult (19 mm SVL, 0.5 g) collected active in riverside vegetation at 2154 h. This specimen represents a new county record and fills a gap in the known range of this species in Oklahoma. *Acris blanchardi* is known from adjacent Creek, Okmulgee, McIntosh, Hughes, Seminole and Lincoln counties, and the nearest known specimen is from ca. 38.5 km to the east in Okmulgee County (OMNH 930).

**ANAXYRUS AMERICANUS (American Toad).** POTTAWATOMIE Co.: Ew Co Rd 113, ca. 0.3 km E of Pickard Dr (35.37691°N, 97.11766°W), 354.14 m elev. 1 June 2022. Jesse J. Whitlock. OSUS A8155 (NRB 0021). One adult (40 mm SVL, 5 g) collected from a road at 2317 h. This specimen represents a new county record. *Anaxyrus*

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